



ABSTRACT AND BIOGRAPHY

Integrating Risk and KM - Lessons from ESMD

In the Exploration Systems Mission Directorate (ESMD), we are integrating risk management and KM with measurable effect. The approach that we have adopted enables us not only to learn lessons from past programs such as Apollo, Space Shuttle, and the International Space Station, but also to generate and share new engineering design, operations and management best practices through our existing continuous risk management procedures. This framework is based on the assumption that risks highlight potential 'knowledge gaps' that might be mitigated through one or more KM practices or artifacts. These same risks also provide a cueing function for the collection of knowledge, particularly on technical or programmatic challenges that might occur again (e.g. system architecture, vehicle control mass, system performance, cost and schedule management). The lessons learned to date include: 1) It's all about enabling WORK, 2) Integrate knowledge management practices with critical work processes, 3) Find a "cueing function" for knowledge capture / transfer effort, 4) Emphasize learning through conversation, 5) Maximize existing tool functionality as "knowledge base", 6) Harness the power of self authoring web tools (wikis, blogs), 7) Do not be afraid to pilot innovative approaches to problem solving, 8) Tools must be simple and easy to use or they will not be used, 9) Collaboration is a resource multiplier, 10) Never forget Rule #1. Continuous Risk Management (CRM) is a core process running through ESMD – tying knowledge management principals and practices to CRM has been an economical way to improve CRM and it also provides a clear purpose for KM.

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